Cluster Statement		Standard	Keep or Propose Change	Change: Removed, Re-written, Broken Up	Quality Standards Rule #	Reason for Proposed Change
Write and interpret numerical expression	5.OA.1	5.OA.1 **Use and explain** parentheses, ~~brackets, or braces~~ in numerical expressions, and evaluate expressions with these symbols.	change	rewritten	#3	To focus on the numerical understanding of the expression versus the process.
Write and interpret numerical expression	5.OA.2	5.OA.2 Write simple expressions that record calculations with numbers **to represent real world problems**, and interpret numerical expressions without evaluating them (*For example, express the*	change	rewritten	#3	To focus on the numerical understanding of the expression versus the process.
Analyze patterns and relationship	5.OA.3	5.OA.3 Generate two numerical patterns using two given rules. ~~Identify apparent relationships between corresponding terms.~~ Form ordered pairs consisting of corresponding terms from the two patterns, and	change	rewritten	#3	Clarifiying that the idea of this standard is the algebraeic relationship between the two patterns.
Understand the place value system.	5.NBT.1	5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	keep			
Understand the place value system.	5.NBT.2	5.NBT.2 Explain **and apply** patterns in the number of zeros of the product when multiplying a number by powers of 10. ~~and~~ **Explain and apply** patterns in the placement of the decimal point **with respect to the values of the digits in the product or the**	Change	rewritten	#3	We felt the Louisiana wording was clearer and focused on understanding and applying.
Understand the place value system.	5.NBT.3	5.NBT.3 Read, write, and compare decimals to thousandths. 3a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded	keep			
Understand the place value	5.NBT.4	5.NBT.4 Use place value understanding to round decimals to any place.	keep			
Perform operations with multi-digit whole	5.NBT.5	5.NBT.5 Fluently multiply multi-digit whole numbers using **an algorithm, including but not limited to** the standard algorithm.	need vertical conversation			We want to ask the group about the wording "standard algorithm"

Perform operations with multi-digit whole numbers and with decimals to	5.NBT.6	5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and Explain the calculation by using equations, rectangular arrays, illustrations, or area models, or	change	rewritten	#3	At this level, if a fifth grade can explain in words without an illustration, that is acceptable. We wanted other strategies based on place value to keep options for students.
Perform operations with multi-digit whole numbers and with decimals to	5.NBT.7	5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the	change	rewritten	#3	"Relate the strategy to a written method" and "explain the reasoning" seemed redundant
Use equivalent fractions as a strategy to add and subtract	5.NF.1	5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions. in such a way as to produce an equivalent sum or difference of fractions with a like denominatorsd denominator. For example, 2/3 + 5/4 = 8/12 + 15/12	change	rewritten	#3	We felt that the intent of this was to let teachers know that students do not need to simplify at the end, so we tried to clarify the last sentence.
Use equivalent fractions as a strategy to add and subtract fractions.	5.NF.2	5.NF.2 a.Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. b.Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result 2/5 + 1/2 =	change	broken up	#1	this standard has two separate ideas, so we broke it into a and b
Apply and extend previous understandings of multiplication and	5.NF.3	5.NF.3 Interpret a fraction as division of the numerator by the denominator (a/b = a ÷ b). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret 3/4 as the result of dividing 3 by 4, noting	keep			
Apply and extend previous understand	5.NF.4	5.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.\n4a. Interpret the product (a/b) × q as a parts of a	keep			

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	5.NF.5	5.NF.5 Interpret multiplication as scaling (resizing), by: 5a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. 5b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n{\times}a)/(n{\times}b)$ to the effect of multiplying a/b by 1.	keep			
Apply and extend previous understand	5.NF.6	5.NF.6 Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	keep			
Apply and extend previous understand	5.NF.7	5.NF.7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. *See Note 7a. Interpret division of a unit fraction by a non-zero	Keep			
Convert like measurement units	5.MD.1	5.MD.1 Convert ~~among different-sized standard~~**customary and metric** measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m). ~~and~~ **U**se these conversions in solving	Change	rewritten	#3	The wording from Tennessee clarifies that both customary and metric need to be used, and also aligned the problem with the fourth grade wording.
Represent and interpret data.	5.MD.2	5.MD.2 Make a line plot to display a data set**.** ~~of measurements in fractions of a unit (1/2, 1/4, 1/8).~~ 2a. Use operations on fractions **of a unit (1/2,1/4, 1/8)** for this grade to solve problems involving	Change	rewritten/added	#1	Algebra wanted a better foundation for Mean Absolute Deviation, by building understanding in fifth grade.
Geometric measurement: understand concepts of volume and relate volume to multiplicati	5.MD.3	5.MD.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement. 3a. A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume. 3b. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.	Keep			

Geometric measurement: understand	5.MD.4	5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	Keep			
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	5.MD.5	5.MD.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. 5a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. 5b. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. 5c. Apply the formulas $V = l \times w \times h$ and $V = B \times h$ (where B is the area of the base) for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real world and mathematical problems. 5d. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right	change	broken up	#1	we thought "a" needed to be split because the two parts seemed to have a different intent
Graph points on the coordinate plane to solve real-world and mathematical problems.	5.G.1	5.G.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-	Keep			
Graph points on the coordinate plane to	5.G.2	5.G.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	Keep			

Classify two-dimensional figures	5.G.3	5.G.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. *For example, all rectangles have four right angles and squares are*	Keep			
Classify two-dimensional figures	5.G.4	5.G.4 Classify two-dimensional figures in a hierarchy based on properties. ***For example, all rectangles are parallelograms, because they are all quadrilaterals with two pairs of opposite,***	change	rewritten	#3	To Clarify heirarchy